

## **Post-Visit Report for SCOTTS BLUFF NATIONAL MONUMENT Mammal Inventory, Bat Inventory – August 2004**

Scotts Bluff National Monument was surveyed for bats the nights of 2-5 August 2004. Mist nets were set in the woods near Central Canal and across the openings to the large culvert running beneath the railroad tracks close to where bricks were made back in the 1930s. Acoustic surveys were conducted along Central Canal and at the same culvert. Surveyors were Dr. Cheryl A. Schmidt and Ms. Shauna R. Marquardt.

### **Mist Net Effort**

Once again, the bat survey work was hampered by the water stage in Gering Canal. Upon arrival, the canal was running strong, with no quiet, isolated pools over which to net. Mist nets, in order to be effective at capturing bats, need to be set over isolated sources of water, or quiet pools of water. Bats were observed flying over Central Canal, but they were flying too high for any of our nets to sample. Setting nets along a full-running body of water such as the canal or a river, is generally not very productive. High winds prevented netting on the last night at the park.

The nets set in the woods by Central Canal on the first night of the survey produced no bats. The nets set over the openings to the culvert on the second night (8/03/2004) of the survey produced 5 Western small-footed myotis (*Myotis ciliolabrum*) as follows:

- 2 Lactating females
- 1 Non-lactating female
- 2 Non-scrotal males

The culvert was carefully examined prior to dusk on both the first and second nights of the survey. No bats were observed during the pre-dusk period, indicating that the bats are not using this structure as a day roost. These bats are apparently roosting elsewhere during the day, emerging to forage, and then using the culvert as a temporary night roost after the first foraging bout.

### **Acoustic Surveys**

Acoustic surveys along Central Canal did indicate that bats were active in the area of Central Canal. Travel and search calls, as well as feeding buzzes, were recorded and will be analyzed this fall.

### **Future Work**

Acoustic recordings will be statistically analyzed for assignment to species. The results will be included in the Final Report for the Mammal Inventory.